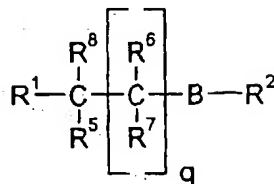


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## WE CLAIM:

1. A compound of the formula:



5 wherein

B is  $\text{CONR}^a$ ,  $\text{NR}^a\text{CO}$ ,  $\text{NR}^a\text{CO}_2$  or  $\text{NR}^a\text{CONR}^a$ ;

$\text{R}^a$  represents hydrogen or (1-6C) alkyl,

q is zero or 1;

- 10  $\text{R}^1$  represents a naphthyl group or a phenyl, furyl, thienyl or pyridyl group which is unsubstituted or substituted by one or two substituents selected independently from halogen; nitro; cyano; hydroxyimino; (1-10C)alkyl; (2-10C)alkenyl; (2-10C)alkynyl; (3-8C)cycloalkyl; hydroxy(3-8C)cycloalkyl; oxo(3-8C)cycloalkyl; halo(1-10C)alkyl;  $(\text{CH}_2)_y\text{X}^1\text{R}^9$  in which y is 0 or an integer of from 1 to 4,  $\text{X}^1$
- 15 represents O, S,  $\text{NR}^{10}$ , CO, COO, OCO,  $\text{CONR}^{11}$ ,  $\text{NR}^{12}\text{CO}$ ,  $\text{NR}^{12}\text{COCOO}$  or  $\text{OCONR}^{13}$ ,  $\text{R}^9$  represents hydrogen, (1-10C)alkyl, (3-10C)alkenyl, (3-10C)alkynyl, pyrrolidinyl, tetrahydrofuryl, morpholino or (3-8C)cycloalkyl and  $\text{R}^{10}$ ,  $\text{R}^{11}$ ,  $\text{R}^{12}$  and  $\text{R}^{13}$  each independently represents hydrogen or (1-10C)alkyl, or  $\text{R}^9$  and  $\text{R}^{10}$ ,  $\text{R}^{11}$ ,  $\text{R}^{12}$  or  $\text{R}^{13}$  together with the nitrogen atom to
- 20 which they are attached form an azetidiny, pyrrolidinyl, piperidinyl or morpholino group; N-(1-4C)alkylpiperazinyl; N-phenyl(1-4C)alkylpiperazinyl; thienyl; furyl; oxazolyl; isoxazolyl; pyrazolyl; imidazolyl; thiazolyl; pyridyl; pyridazinyl; pyrimidinyl; dihydro-thienyl; dihydrofuryl; dihydrothiopyranyl; dihydropyranyl; dihydrothiazolyl; (1-4C)alkoxycarbonyldihydrothiazolyl; (1-4C)alkoxycarbonyldimethyldihydrothiazolyl; tetrahydro-thienyl; tetrahydrofuryl; tetrahydrothiopyranyl; tetrahydropyranyl; indolyl; benzofuryl; benzothienyl; benzimidazolyl; and a group of formula  $\text{R}^{14}-(\text{L}^a)_n-\text{X}^2-(\text{L}^b)_m$  in which  $\text{X}^2$
- 25

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- represents a bond, O, NH, S, SO, SO<sub>2</sub>, CO, CH(OH), CONH, NHCO, NHCONH, NHCOO, COCONH, OCH<sub>2</sub>CONH or CH=CH, L<sup>a</sup> and L<sup>b</sup> each represent (1-4C)alkylene, one of n and m is 0 or 1 and the other is 0, and R<sup>14</sup> represents a phenyl or heteroaromatic group which is unsubstituted or substituted by one or two of halogen, nitro, cyano, hydroxyimino, (1-10C) alkyl, (2-10C)alkenyl, (2-10C)alkynyl, (3-8C)-cycloalkyl, 4-(1,1-dioxotetrahydro-1,2-thiazinyl), halo(1-10C)alkyl, cyano(2-10C)alkenyl, phenyl, and (CH<sub>2</sub>)<sub>z</sub>X<sup>3</sup>R<sup>15</sup> in which z is 0 or an integer of from 1 to 4, X<sup>3</sup> represents O, S, NR<sup>16</sup>, CO, CH(OH), COO, OCO, CONR<sup>17</sup>, NR<sup>18</sup>CO, NHSO<sub>2</sub>, NHSO<sub>2</sub>NR<sup>17</sup>, NHCONH, OCONR<sup>19</sup> or NR<sup>19</sup>COO, R<sup>15</sup> represents hydrogen, (1-10C)alkyl, phenyl(1-4C)alkyl, halo(1-10C)alkyl, (1-4C)alkoxycarbonyl(1-4C)alkyl, (1-4C)alkylsulfonylamino(1-4C)alkyl, (N-(1-4C)alkoxycarbonyl)(1-4C)alkylsulfonylamino-(1-4C)alkyl, (3-10C)alkenyl, (3-10C)alkynyl, (3-8C)-cycloalkyl, camphoryl or an aromatic or heteroaromatic group which is unsubstituted or substituted by one or two of halogen, (1-4C)alkyl, halo(1-4C)alkyl, di(1-4C)alkylamino and (1-4C)alkoxy and R<sup>16</sup>, R<sup>17</sup>, R<sup>18</sup> and R<sup>19</sup> each independently represents hydrogen or (1-10C)alkyl, or R<sup>15</sup> and R<sup>16</sup>, R<sup>17</sup>, R<sup>18</sup> or R<sup>19</sup> together with the nitrogen atom to which they are attached form an azetidiny, pyrrolidinyl, piperidinyl or morpholino group;
- R<sup>2</sup> represents hydrogen, (1-6C)alkyl, (3-6C)cycloalkyl, fluoro(1-6C)alkyl, chloro(1-6C)alkyl, (2-6C)alkenyl, (1-4C)alkoxy(1-4C)alkyl, (1-4C)alkylCO<sub>2</sub>(1-4C)alkyl, phenyl(1-6C)alkyl, heteroaromatic, phenyl which is unsubstituted or substituted by halogen, (1-4C)alkyl or (1-4C)alkoxy, or a group of formula R<sup>3</sup>R<sup>4</sup>N in which R<sup>3</sup> and R<sup>4</sup> each independently represents (1-4C)alkyl or, together with the nitrogen atom to which they are attached form an azetidiny, pyrrolidinyl, piperidinyl, morpholino, piperazinyl, hexahydroazepinyl or octahydroazocinyl group; and

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R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> are each independently selected from the group consisting of hydrogen, (1-6C)alkyl; aryl(1-6C)alkyl; (2-6C)alkenyl; aryl(2-6C)alkenyl and aryl; or

5 two of R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> together with the carbon atom or carbon atoms to which they are attached form a (3-8C) carbocyclic ring; and the remainder of R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> represent hydrogen; or a pharmaceutically acceptable salt thereof;

with the proviso that when R<sup>2</sup> represents R<sup>3</sup>R<sup>4</sup>N, then B is other than  
10 NR<sup>a</sup>CONR<sup>a</sup> or CONR<sup>a</sup>.

2. A compound according to claim 1 wherein B is CONR<sup>a</sup>.

3. A compound according to claim 1 wherein B is NR<sup>a</sup>CO.

15

4. A compound according to claim 1 wherein B is NR<sup>a</sup>CO<sub>2</sub>.

5. A compound according to claim 1 wherein B is NR<sup>a</sup>CONR<sup>a</sup>.

20

6. A compound as claimed in any one of claims 1 to 5 wherein q is 1.

7. A compound as claimed in any one of claims 1 to 5 wherein R<sup>a</sup> is hydrogen.

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8. A compound as claimed in any one of claims 1-5 wherein R<sup>2</sup> represents hydrogen, (1-6C)alkyl, (3-6C)cycloalkyl, fluoro(1-6C)alkyl, chloro(1-6C)alkyl, (2-6C)alkenyl 1-4C)alkoxy(1-4C)alkyl, heteroaromatic, or phenyl which is unsubstituted or substituted by halogen, (1-4C)alkyl or (1-4C)alkoxy.

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9. A compound according to claim 8 wherein  $R^2$  represents hydrogen, (1-6C)alkyl, (3-6C)cycloalkyl or heteroaromatic, or phenyl which is unsubstituted or substituted by halogen, (1-4C)alkyl or (1-4C)alkoxy.

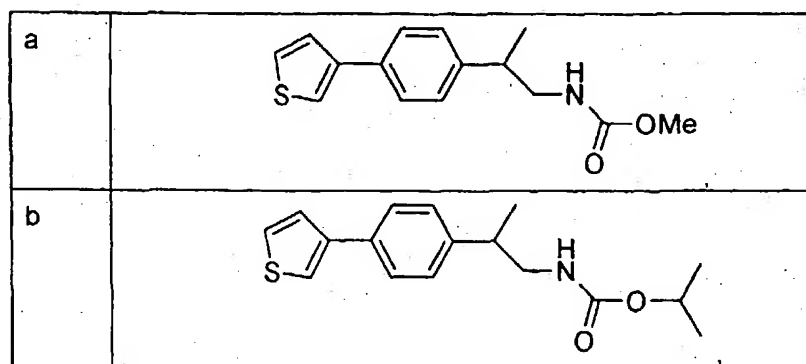
10. A compound according to claim 9 wherein  $R^2$  represents methyl, ethyl, isopropyl, t-butyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, isovaleryl, phenyl, benzyl, 2-furyl, 2-thienyl, 5-oxazolyl, 2-pyridyl, 3-pyridyl, 4-pyridyl

11. A compound as claimed in any one of claims 1-5 wherein q is 1 and  $R^6$  and  $R^7$  represent hydrogen.

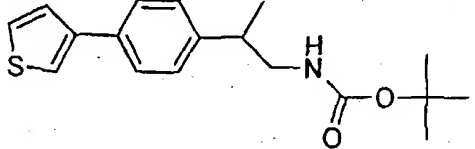
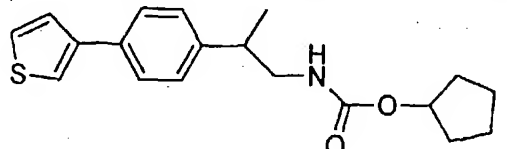
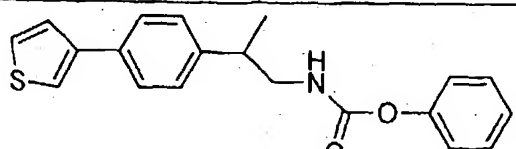
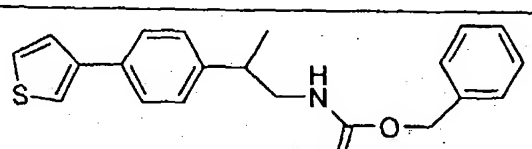
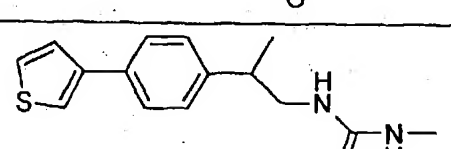
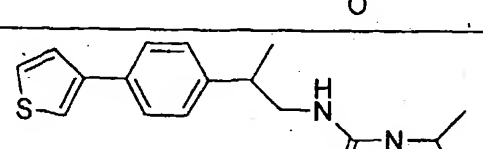
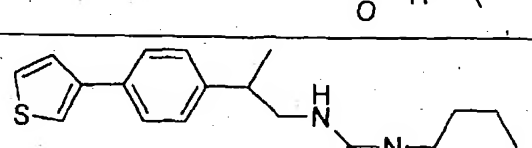
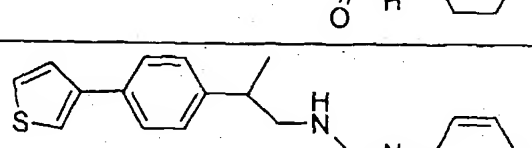
12. A compound according to claim 11 wherein  $R^5$  and  $R^8$  are each independently hydrogen or (1-4C)alkyl, or together with the carbon atom to which they are attached form a (3-8C) carbocyclic ring.

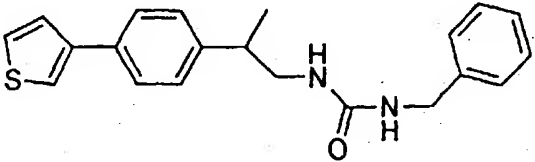
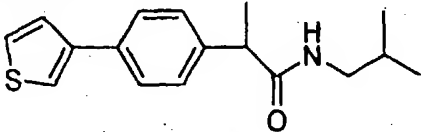
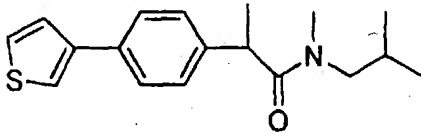
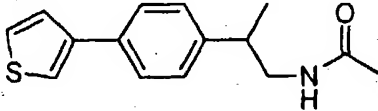
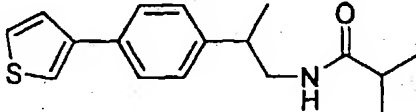
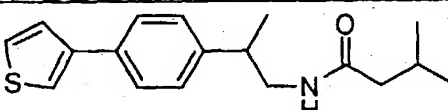
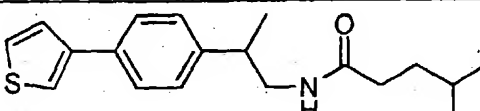
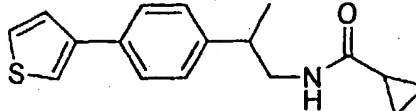
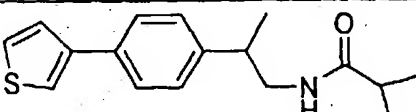
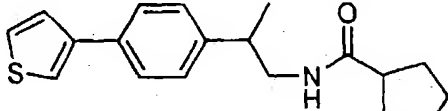
13. A compound as claimed in any one of claims 1-12 wherein  $R^8$  represents methyl and  $R^5$  represents hydrogen.

14. A compound as claimed in Claim 1, which is selected from:

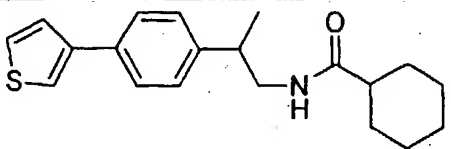
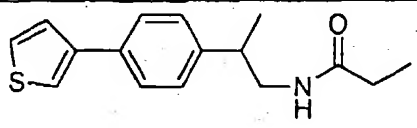
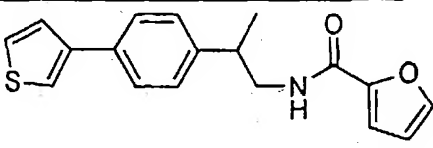
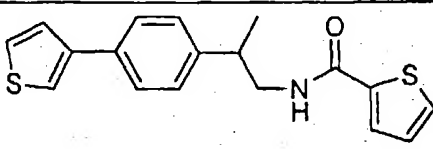
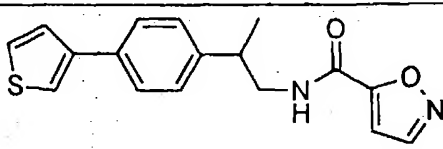
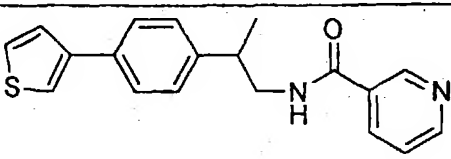
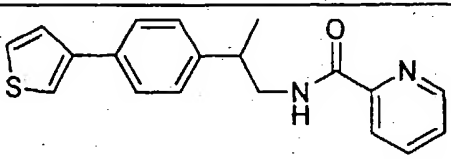
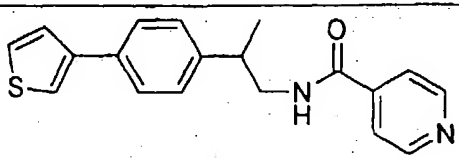
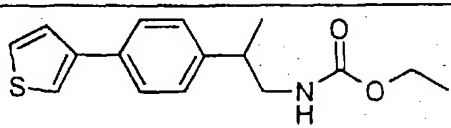


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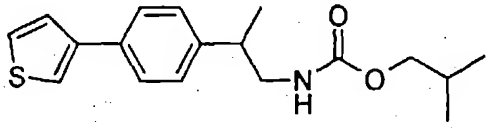
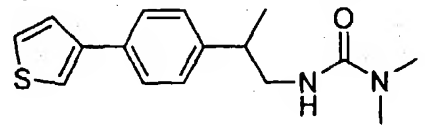
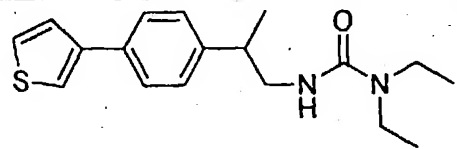
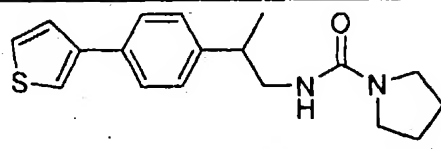
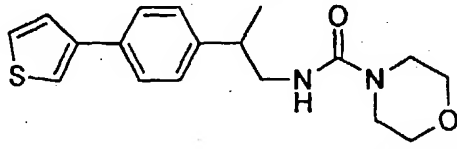
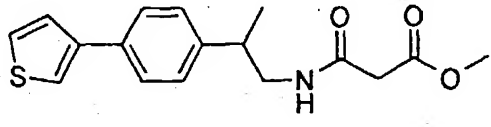
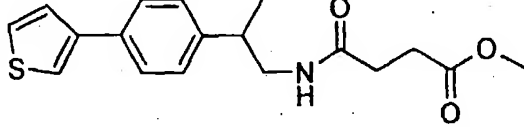
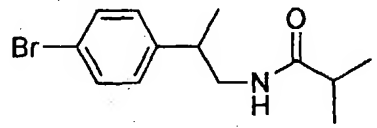
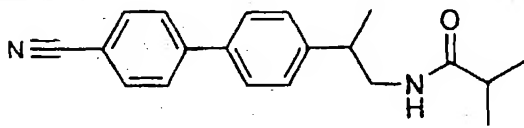
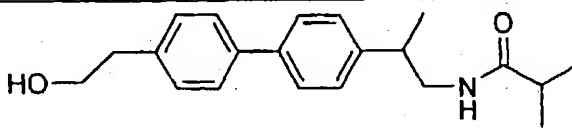
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d	 <chem>CC(C)CNC(=O)OC1CCCC1</chem>
e	 <chem>CC(C)CNC(=O)OC1=CC=CC=C1</chem>
f	 <chem>CC(C)CNC(=O)OCC1=CC=CC=C1</chem>
g	 <chem>CC(C)CNC(=O)N</chem>
h	 <chem>CC(C)CNC(=O)NC(C)C</chem>
i	 <chem>CC(C)CNC(=O)NC1CCCCC1</chem>
j	 <chem>CC(C)CNC(=O)NC1=CC=CC=C1</chem>

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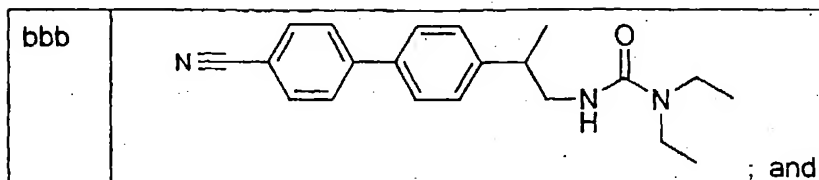


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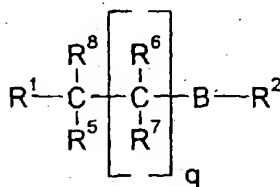
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pharmaceutically acceptable salts thereof.

15. A pharmaceutical composition, which comprises a compound as  
5 claimed in claim 1 and a pharmaceutically acceptable diluent or carrier.

16. A method of potentiating glutamate receptor function in a mammal  
requiring such treatment, which comprises administering an effective amount of a  
compound of formula:



10 wherein

B is  $\text{CONR}^a$ ,  $\text{NR}^a\text{CO}$ ,  $\text{NR}^a\text{CO}_2$  or  $\text{NR}^a\text{CONR}^a$ ;

$R^a$  represents hydrogen or (1-6C) alkyl,

q is zero or 1;

$R^1$  represents an unsubstituted or substituted aromatic or heteroaromatic group;

15

$R^2$  represents hydrogen, (1-6C)alkyl, (3-6C)cycloalkyl, fluoro(1-6C)alkyl,  
chloro(1-6C)alkyl, (2-6C)alkenyl, (1-4C)alkoxy(1-4C)alkyl, (1-4C)alkyl $\text{CO}_2$ (1-  
4C)alkyl, phenyl(1-6C)alkyl, heteroaromatic, phenyl which is unsubstituted or  
substituted by halogen, (1-4C)alkyl or (1-4C)alkoxy, or a group of formula

- 20  $R^3R^4N$  in which  $R^3$  and  $R^4$  each independently represents (1-4C)alkyl or,  
together with the nitrogen atom to which they are attached form an azetidiny,  
pyrrolidinyl, piperidinyl, morpholino, piperazinyl, hexahydroazepinyl or  
octahydroazocinyl group; and

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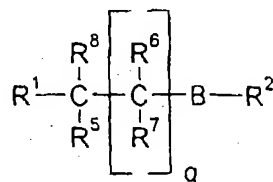
$R^5$ ,  $R^6$ ,  $R^7$  and  $R^8$  are each independently selected from the group consisting of hydrogen, (1-6C)alkyl; aryl(1-6C)alkyl; (2-6C)alkenyl; aryl(2-6C)alkenyl and aryl; or

- 5 two of  $R^5$ ,  $R^6$ ,  $R^7$  and  $R^8$  together with the carbon atom or carbon atoms to which they are attached form a (3-8C) carbocyclic ring; and the remainder of  $R^5$ ,  $R^6$ ,  $R^7$  and  $R^8$  represent hydrogen; or a pharmaceutically acceptable salt thereof;
- with the proviso that when  $R^2$  represents  $R^3R^4N$ , then B is other than
- 10  $NR^aCONR^a$  or  $CONR^a$ .

17. A method of potentiating glutamate receptor function in a mammal requiring such treatment, which comprises administering an effective amount of a compound of claim 1.

15

18. A method of treating a cognitive disorder; a neuro-degenerative disorder; age-related dementia; age-induced memory impairment; movement disorder; reversal of a drug-induced state; depression; attention deficit disorder; attention deficit hyperactivity disorder; psychosis; cognitive deficits associated
- 20 with psychosis; or drug-induced psychosis in a patient, which comprises administering to a patient in need thereof an effective amount of a compound of formula:



wherein

- 25 B is  $CONR^a$ ,  $NR^aCO$ ,  $NR^aCO_2$  or  $NR^aCONR^a$ ;  
 $R^a$  represents hydrogen or (1-6C) alkyl,  
 q is zero or 1;  
 $R^1$  represents an unsubstituted or substituted aromatic or heteroaromatic group;

R<sup>2</sup> represents hydrogen, (1-6C)alkyl, (3-6C)cycloalkyl, fluoro(1-6C)alkyl, chloro(1-6C)alkyl, (2-6C)alkenyl, (1-4C)alkoxy(1-4C)alkyl, (1-4C)alkylCO<sub>2</sub>(1-4C)alkyl, phenyl(1-6C)alkyl, heteroaromatic, phenyl which is unsubstituted or substituted by halogen, (1-4C)alkyl or (1-4C)alkoxy, or a group of formula R<sup>3</sup>R<sup>4</sup>N in which R<sup>3</sup> and R<sup>4</sup> each independently represents (1-4C)alkyl or, together with the nitrogen atom to which they are attached form an azetidiny, pyrrolidinyl, piperidinyl, morpholino, piperazinyl, hexahydroazepinyl or octahydroazocinyl group; and

R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> are each independently selected from the group consisting of hydrogen, (1-6C)alkyl; aryl(1-6C)alkyl; (2-6C)alkenyl; aryl(2-6C)alkenyl and aryl; or

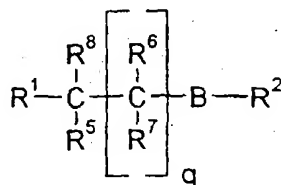
two of R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> together with the carbon atom or carbon atoms to which they are attached form a (3-8C) carbocyclic ring; and the remainder of R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> represent hydrogen; or a pharmaceutically acceptable salt thereof;

with the proviso that when R<sup>2</sup> represents R<sup>3</sup>R<sup>4</sup>N, then B is other than NR<sup>a</sup>CONR<sup>a</sup> or CONR<sup>a</sup>.

19. A method of treating a cognitive disorder; a neuro-degenerative disorder; age-related dementia; age-induced memory impairment; movement disorder; reversal of a drug-induced state; depression; attention deficit disorder; attention deficit hyperactivity disorder; psychosis; cognitive deficits associated with psychosis; or drug-induced psychosis in a patient, which comprises administering to a patient in need thereof an effective amount of a compound according to claim 1.

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20. A method for improving memory or learning ability in a patient, which comprises administering to a patient in need thereof an effective amount of a compound of formula:



5 wherein

B is  $\text{CONR}^a$ ,  $\text{NR}^a\text{CO}$ ,  $\text{NR}^a\text{CO}_2$  or  $\text{NR}^a\text{CONR}^a$ ;

$\text{R}^a$  represents hydrogen or (1-6C) alkyl,

q is zero or 1;

$\text{R}^1$  represents an unsubstituted or substituted aromatic or heteroaromatic group;

10

$\text{R}^2$  represents hydrogen, (1-6C)alkyl, (3-6C)cycloalkyl, fluoro(1-6C)alkyl, chloro(1-6C)alkyl, (2-6C)alkenyl, (1-4C)alkoxy(1-4C)alkyl, (1-4C)alkyl $\text{CO}_2$ (1-4C)alkyl, phenyl(1-6C)alkyl, heteroaromatic, phenyl which is unsubstituted or substituted by halogen, (1-4C)alkyl or (1-4C)alkoxy, or a group of formula

15  $\text{R}^3\text{R}^4\text{N}$  in which  $\text{R}^3$  and  $\text{R}^4$  each independently represents (1-4C)alkyl or, together with the nitrogen atom to which they are attached form an azetidiny, pyrrolidiny, piperidiny, morpholino, piperaziny, hexahydroazepiny or octahydroazociny group; and

20  $\text{R}^5$ ,  $\text{R}^6$ ,  $\text{R}^7$  and  $\text{R}^8$  are each independently selected from the group consisting of hydrogen, (1-6C)alkyl; aryl(1-6C)alkyl; (2-6C)alkenyl; aryl(2-6C)alkenyl and aryl; or

two of  $\text{R}^5$ ,  $\text{R}^6$ ,  $\text{R}^7$  and  $\text{R}^8$  together with the carbon atom or carbon atoms to  
25 which they are attached form a (3-8C) carbocyclic ring; and the remainder of  $\text{R}^5$ ,  $\text{R}^6$ ,  $\text{R}^7$  and  $\text{R}^8$  represent hydrogen; or a pharmaceutically acceptable salt thereof;

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with the proviso that when  $R^2$  represents  $R^3R^4N$ , then B is other than  $NR^aCONR^a$  or  $CONR^a$ .

21. A method for improving memory or learning ability in a patient,  
5 which comprises administering to a patient in need thereof an effective amount  
of a compound according to claim 1.